

Remarks

By this amendment:

1. reference numbers in FIG 1 are corrected,
2. several errors in the Specification are corrected,
3. claim 1 is amended,
4. new claims 4-6 are added,
5. reason is given for allowance of rejected claims 1-3 and new claim 4-6.

The Office Action has eleven specification informalities. All of these informalities are corrected pursuant to the Office Action. However, applicant's copy of the application, which is believed to be an exact copy of the application as filed, does not have the Office Action informalities in items 1 and 5-9.

An important feature of applicant's invention is a synchronizer having an integrated self-energizing, pre-energizing assembly and blocker assembly such as assembly (44) in combination with a detent mechanism (70). The detent mechanism (70) ensures proper engaging alignment of non-self-energizing surfaces (46c, 48c, 54e, 56e) when a shift sleeve (36) is in the so-called neutral range and during initial movement of the shift sleeve from neutral. Claim 1 as originally filed is believed to patently define over cited US Patent 5,425,437 (Nellums) Nellums does not disclose or suggest an integrated self-energizing, pre-energizing assembly, and blocker assembly such as assembly (44) in combination with a detent mechanism (70).

The rejection states that, *"Claims 1-3 are rejected under 35U.S.C. 102(b) as being anticipated by Nellums (437). Nellums discloses a synchronizer including a hub 32, first and second jaw teeth 28,30, a shift sleeve 34, first and second friction surfaces 24,26, first and second blocker surfaces 44,46, pre-energizing means 52, first and second self-energizing surfaces 70a,70b separated by non-self-energizing surfaces 70c, third and fourth self-energizing 72a,72b separated by non-self-energizing surfaces 72c, a member 63 mounted on the shift sleeve, and detent means, The hub includes an annular flange defining external splines 38 and has a radial bore receiving resilient means 58 for biasing the follower 62 into engagement with a detent in the sleeve. The detent is formed at 63a in a radially inward facing surface of the internal splines."*

This rejection is respectfully traversed. The Nellums detent 63a not formed in a radially inwardly facing surface of the internal splines as stated in the rejection. Detent 63a is formed in a torque ring 63 that has limited rotation relative to the shift sleeve and the

internal splines. Accordingly, claim 1 as originally filled is not anticipated under 35 U.S.C. 102(b) by Nellums.

Additionally, claim 1 is believed to be patently defined further over Nellums in view of features added thereto by this office action response. These features include a further requirement that the third and fourth blocker surfaces and the third and fourth self-energizing surfaces be circumferentially interposed between the first and second blocker surfaces and the first and second self-energizing surfaces, and that the detent means include a recess affixed against movement relative to the shift sleeve. Nellums does not disclose or suggest these features.

Claims 2 and 3 are believed to be allowable since they depend from allowable claim 1 and since they add features of applicant's detent means that are not disclosed or suggested by Nellums.

New claim 4 depends from claim 1 and adds structure to the integrated self-energizing, pre-energizing assembly, and blocker assembly (44) that are not disclosed or suggested by Nellums.

New claims 5 and 6, which are patterned after claims 2 and 3, are believed to be allowable since they depend from allowable claim 4 and since they add features of applicants detent means that are not disclosed or suggested by Nellums.

In view of the above, this application and claims 1-6 therein are believed to be allowable.

The Commissioner is hereby authorized to charge any fees which may be required or credit any overpayment to Account NO. 05-0275.

Respectfully submitted,

Typed: 03/11/2006

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FIG 1